THE URBAN DISTRICT COUNCIL OF ESTON.

ANNUAL REPORT

BY

THE MEDICAL OFFICER,

FOR THE

YEAR ENDING 31ST DECEMBER, 1898.

Middlesbrough:

WILLIAM APPLEYARD & SONS, LIMITED, PRINTERS, 12 ROYAL EXCHANGE.

1899.

The Urban District Council of Eston.

Councillors :

ANDERSON, JOHN (Vice-Chairman)
BEACHAM, ELISHA
BELLWOOD, GEORGE
CARR, JOSEPH
EVANS, DAVID (Chairman)
DAVIES, THOS.
MOSS, JOHN
PEARSON, JOHN WM.
THOMAS, E.
TOWNSEND, DR.
WHITE, CHARLES
WILKINSON, HUGH

Clerk :

JOHN THOMAS BELK, Solicitor, Middlesbrough.

Surveyor and Sanitary Inspector *(pro tem.)*

GEORGE T. CARR.

Medical Officer :

GEORGE C. H. FULTON, M.B., C.M.

Sanatorium Medical Officer :

GEORGE C. H. FULTON, M.B., C.M., Eston.

Collector :

ROBERT FRANKS, Normanby.

ESTON URBAN DISTRICT COUNCIL.

ANNUAL REPORT

OF

THE MEDICAL OFFICER OF HEALTH.

TO THE ESTON URBAN DISTRICT COUNCIL.

GENTLEMEN,

I have the honour of submitting to you my Annual Report on the Health of Eston District during the year 1898, with an account of the Sanitary work performed.

STATISTICAL SUMMARY.

Area of the District in acres	2,251
Estimated Population at Mid-Summer	11,000
Density of Population per acre	4·8
Inhabited Houses	2,050
Rateable value of District	£65,837 10s.
Births	414
Birth-rate	37·63
Deaths	195
Death-rate	17·72
Zymotic Deaths	34
Zymotic Death-rate	3·09
Infantile Mortality	54
Ratio of Infant Deaths to Births per 1,000	1·30
Infectious cases notified	106
Infectious cases isolated at the Sanatorium	45

VITAL STATISTICS.

During the year the births of 414 children have been registered. Of these 209 were boys and 205 were girls. The total gives a rate of 37·63 per 1,000 of the estimated population. Last year the birth-rate was 38·99 per 1,000 of the estimated population.

MORTAL STATISTICS.

During the year ending December 31st, 195 deaths have been registered in the Eston Urban Sanitary Distrct. The death-rate was equal to 17·72 per 1,000 of the population estimated to the middle of the year. Last year (1897) 176 deaths were registered, the death rate being equal to 16·45 per 1,000 per annum of the estimated population.

TABLE I.

Showing the Death-rate of Eston, 1886 to 1898, inclusive :—

Rates per 1,000 of population	for	1898	were :–	Births	37·63,	Deaths	17·72	
,,	,,	1897	,,	,,	38·99,	,,	16·45	
,,	,,	1896	,,	,,	36·37,	,,	16·45	
,,	,,	1895	,,	,.	37·24,	,,	17·48	
,.	,,	1894	,,	,,	31·41,	,,	15·70	
,,	,,	1893	,,	,,	33·09,	,,	18·51	Average Death-rate for 12 years 17·59
,,	,,	1892	,,	,,	34·96,	,,	19·54	
,,	,,	1891	,,	,,	38·66.	,,	17·76	
,,	,,	1890	,,	,,	35·99,	,,	17·33	
,,	,,	1889	,,	,,	34·33,	,,	16·25	
,,	,,	1888	,,	,,	40·39,	,,	20·66	
,,	,,	1887	,,	,,	32·73,	,,	16·93	
,,	,,	1886	,,	,,	38·11,	,,	16·60	

II.—Table showing the Number of Deaths from the Zymotic Diseases in the Nine Years 1890 to 1898.

	1890	1891	1892	1893	1894	1895	1896	1897	1898
Smallpox	...	...	...	..	...	...	...	1	6
Measles	1	7	28	2	...	1	21	2	1
Scarlet Fever	...	2	...	.	...	1	3	1	...
Diphtheria	5	3	...	1	.	5	3	...	...
Whooping Cough	9	4	8	2	13	1	7	9	5
Fever — Typhus..	...	...	...	7	.	...	...	...	..
Fever — Enteric..	8	5	...	4	4	2	4	2	11
Fever — Simple Continued	5	4	9	...	...	9	..	3	1
Diarrhœa	10	7	10	13	11	18	11	5	10
Deaths from 7 Chief Zymotic Diseases	38	32	55	29	28	37	49	23	34
Deaths from other causes	174	158	154	169	140	150	127	153	161
Totals for each year to the District	212	190	209	198	168	187	176	176	195
Death-rate from 7 Chief Zymotic Diseases, per 1,000	3·10	2·97	5·14	2 71	2·61	3 45	4·58	2·15	3·09
Death-rate from other causes, per 1,000	14·23	14·79	14·40	15·80	13·09	14·03	11·87	14·30	14·63
General Death-rate, per 1,000	17·33	17·76	19·54	18 51	15·70	17·48	16·45	16·45	17 72

CAUSES OF DEATH.

Diseases of the Respiratory organs caused 35 deaths, this is somewhat numerous. I am afraid that, owing to the nature of the employment of so many of the population, this is likely to continue. The sudden changes of temperature from the works to the cold and *damp* of the outer air, more especially in the case of those badly clothed and ill fed, must affect injuriously the lungs, the air passages of which have been already more or less irritated by the solid particles suspended in the air of the works.

Tuberculosis and wasting (consumption) claims 31 deaths There can be no doubt that the effect of good Sanitary work will be to reduce the death rate from Consumption. It has done so very materially in many districts both at home and abroad. Phthisis is essentially a disease of overcrowding and bad ventilation. The public do not seem to have realized this fact, nor do they consider the infectious nature of the disease. Unfortunately with us it is so common that little attention is paid to it, and the fact, if known, is forgotten that it causes more than half the number of deaths caused by all other chest affections—although there can be little doubt of the infectious nature of the disease, yet pure air and good sunlight are the best preventatives of any infectious disease. Want of exercise, bad food and impure air, more especially that rendered so by respiration or exhalation from the human body, tend materially to foster the disease—in the Army and Navy an increase of cubic space to each man and efficient ventilation, without the employment of any other remedy, caused a notable decline in the number of deaths from this cause. In our cities the crudest shelter, though cold and comfortless, is better than the crowded and heated dwelling. *Good drainage*, by which the soil and air are made free from moisture, is one of the best means of preventing this disease. Some of the colder countries are comparatively free from it. Greenland and the northern parts of America suffer little from it, whilst some of the best Sanitoria for this disease are situated on the Swiss Alps, where the air though very cold, is dry, where the sun shines brightly, and the sky is seldom clouded. In our own country the South of England has been known for its health resorts, to which many invalids threatened with this disease may and do repair. Dryness and sunlight are the two great features of which they boast, and justly so. With us we have, unfortunately, an almost constant moist air during the greater part of the year, and the sun only too seldom shines upon us. We have a heavy clay soil, and there can be no doubt that the prevalence of Phthisis is more or less connected therewith, and that the dryness of the soil, which more or less accompanies good drainage, would tend to eliminate this disease.

Report on all Infectious Cases notified during the year 1898.

No.	Date	Address	Disease	Source of Infection. Remarks.
	1898			
1	Jan. 3	43. Jubilee Rd., Eston	Erysipelas	Wound on Face
2	,, 8	Bank House ,,	Scarlet Fever	
3	,, 12	,, ,,	,,	
4	,, 14	,, ,,	,,	
5	,, ,,	123, California ,,	,,	
6	,, 26	115, Vickers St , Grangetown	,,	
7	,, 27	Bank House, Eston	,,	
8	,, 29	,, ,,	,,	
9	,, 31	69, California ,,	,,	
10	Feb. 14	116, Stapylton St., Grangetown	Continued Fever	
11	,, ,,	33, Jubilee Road, Eston ...	Erysipelas	
12	,, 24	69, California ,, ...	Scarlet Fever	
13	,, 28	Taylor's Model, South Bank...	Small pox	Middlesbrough
14	,, ,,	85, Bessemer St., Grangetown	,,	Lodger worked with No. 13
15	March 1	115, Stapylton St., ,,	,,	Football Field, Middlesbro
16	,, 4	2 ,, ,,	,,	,, ,,
17	,, ,,	11, Peel Street South Bank	,,	Unknown
18	,, 6	61, William Street. Eston ...	,,	,,
19	,, 9	110, Vickers St., Grangetown	Erysipelas	,,
20	,, ,,	69, California, Eston ...	Scarlet Fever	From No. 12
21	,, 14	28, Vickers St., Grangetown...	Small pox	Unknown
22	,, 15	Taylor's Model, South Bank...	,,	From No. 13
23	,, 18	27, Peel Street ,,	,,	,, 17
24	,, ,,	,, ,,	,,	,, 17
25	,, ,,	11 ,, ,,	,,	,, 17
26	,, ,,	27 ,, ,,	,,	,, 17
27	,, ,,	11 ,, ,,	,,	,, 17
28	,, 23	13, West Street, Eston ...	,,	,, 18
29	,, ,,	23, William Street, Eston ...	,,	,, 18
30	,, 26	64, Branch End ...	,,	,, 17
31	,, 31	25, Whitworth Rd , Granget'n	Erysipelas	Unknown
32	April 1	28, Peel Street, South Bank ..	Small pox	From No. 25
33	,, ,,	8, Vaughan St., Grangetown..	Enteric Fever	Unknown
34	,, 4	Meadowcroft, Eston ...	Small pox	,,
35	,, 6	Wilkinson, High Street, Eston	Entertic Fever	Probably due to soil
36	,, ,,	51, Jubilee Road, Eston ...	,,	Unknown
37	,, 11	6 South Street, ,, ...	,,	,,
38	,, 12	22, Holden St., Grangetown ...	Small pox	,,
39	,, 13	Tonkin, High Street, Eston ...	Erysipelas	,,
40	,, 21	33, West Street, ,,	Scarlet Fever	,,
41	,, 25	37, Vaughan St., Grangetown	Small pox	Middlesbrough
42	May 5	Dale, Prospect Terrace, Eston	Erysipelas	Unknown
43	,, 6	37, Vaughan St., Grangetown	Small pox	No. 41
44	,, 8	,, ,,	,,	No. 41
45	,, 10	137, Bessemer St., ,,	Continued Fever	Imported from N. Ormesby
46	,, 11	9, Vaughan St., ,,	Entertic Fever	No. 33
47	,, 12	69, Stapylton St., ,,	Small pox	Mistaken Diagnosis
48	,, 29	108, Normanby Rd., S. Bank	Scarlet Fever	Schools
49	June 3	59, Vickers St., Grangetown	Small pox	Middlesbrough – Clayton's Waiting Room
50	,, 25	19, Holden St., ,,	Continued Fever	Eating raw mussels from slems
51	,, 30	57, Bessemer St., ,,	Enteric Fever	Defective sink
52	July 4	110, Normanby Rd., S. Bank	Scarlet Fever	No. 48
53	,, ,,	,, ,,	,,	No. 48
54	,, 13	Tithe Cottage, Old Eston	,,	5, Cleveland St., Norm'nby
55	,, 22	94, Vaughan St., Grangetown	Enteric Fever	Cause unknown
56	,, 23	63, Stapylton St., ,,	,,	,, ,,
57	,, ,,	17, Wood St., ,,	,,	
58	,, 25	94, Cheetham St., ,,	,,	Cause unknown
59	,, 28	10, Pochin Road ,,	,,	,, ,,

Report on all Infectious Cases—Continued.

No.	Date	Address	Disease	Source of Infection. Remarks.
60	Aug. 9	47, Vaughan St., Grangetown	Enteric Fever	Drank Water from tap at Plate mill
61	,, 11	9, Bessemer St. ,,	,,	Drank water from branch tap
62	,, 18	10, Pochin Street ,,	,,	No. 59
63	,, 22	36, Henry Street, South Bank	,,	Drank water from Blacksmith's shop
64	Sept. 2	47, Stapylton St., Grangetown	,,	Drank water from Blacksmith's Shop
65	,, 3	22, South Street, Eston ...	,,	Drank water from tap near rail mill
66	,, ,,	11, Stapylton St., Grangetown	,,	Girl has been to the works with dinner and drank water from a tap
67	,, ,,	4, Laing Street ,,	,,	Drank water from a tap at rail mill
68	,, 6	46, West Street, Eston ...	,,	Drank water from tap in foundry
69	,, 7	,, ,, ...	,,	do.
70	,, 9	89, Stapylton St., Grangetown	,,	do.
71	,, ,,	45, Wood Street ,,	,,	Boy has been to works and drank water from a tap near fitter's shop
72	,, ,,	10, Eston Grange	,,	Porter at Eston Grange Station
73	,, 11	Brick Terrace, Eston	Erysipelas	
74	,, 14	71, Bessemer St., Grangetown	Enteric Fever	Drinks Water from tap at Steel works
75	,, 15	Tithe Cottage, Eston ...	Scarlet Fever	No. 54
76	,, 22	134, Vaughan St., Grangetown	Enteric Fever	Mussels—Slems
77	,, 26	36, Beacham St., South Bank	Scarlet Fever	Cause unknown
78	,, 27	57, Bessemer St., Grangetown	Enteric Fever	Drinks water from Steel works tap
79	Oct. 3	46, William Street, Eston ...	Continued Fever	Drains recently opened
80	,, 4	18, Crossbeck Terrace, Eston	Erysipelas	
81	,, ,,	9, Branch End	Continued Fever	Cause unknown
82	,, 5	117, Vaughan St., Grangetown	Enteric Fever	,, ,,
83	,, 11	64, Branch End	,,	Drinks water from tap at Cleveland furnaces
84	,, 12	3, Peel Street, South Bank ...	Continued Fever	Cause unknown
85	,, 13	38, West Street, Eston ...	Enteric Fever	,, ,,
86	,, 14	11, Beacham St., South Bank	,,	,, ,,
87	,, 17	92, Stapylton St., Grangetown	Continued Fever	,, ,,
88	,, 21	10, Eston Grange	Enteric Fever	No. 72
89	,, 26	21, Branch End	,,	Cause unknown
90	,, 27	15, Beacham St , South Bank	Scarlet Fever	No. 78
91	,, ,,	98, Stapylton St., Grangetown	Continued Fever	Cause unknown
92	,, 28	15, Peel Street, South Bank ...	Enteric Fever	,, ,,
93	,, 29	97, Jubilee Road, Eston ...	,,	Back street sink in bad state
94	,, ,,	32, Stapylton St., Grangetown	Continued Fever	Cause unknown
95	,, ,,	87, Vaughan Street, ,,	Enteric Fever	,, ,,
96	,, 31	95, Vickers Street ,,	,,	,, ,,
97	Nov. 1	46, Wood Street ,,	,,	No. 71
98	,, 3	140, Vaughan Street ,.	,,	No cause
99	,, 7	46, William Street, Eston ...	Continued Fever	No. 79
100	,, 8	8, Bottomley's Row ,,	Scarlet Fever	Cause unknown
101	,, 11	32, Stapylton St., Grangetown	Enteric Fever	No. 94
102	,, 17	90 ,, ,,	Continued Fever	Pigeons in yard
103	,, 21	90, Cheetham St. ,,	Entertic Fever	,,
104	,, 30	95, Vaughan St. ,,	,,	Cause unknown
105	Dec. 2	98, Stapylton St. ,,	,,	No. 91
106	,, 22	16, Crossbeck Terrace, Eston	,,	Unknown

Zymotic Diseases have not caused more than an ordinary number of deaths, nothwithstanding the largely increased number of deaths from Typhoid fever and Smallpox. The first of these diseases to which I would call your attention is :—

Diarrhoea. I believe that a great many of the deaths from this cause occurs among infants and young children owing to improper feeding and neglect: but there can be little doubt that the high air temperature, acting directly or indirectly on the soil, has a marked effect on the prevalence of this disease.

Measles. Have not been prevalent during the year—only one death occurred from this disease.

Scarlet Fever was epidemic in the last quarter of 1897 and the first quarter of 1898, but we had no deaths. This was partly due to the mild form that it assumed and greatly due to the *proper* care and isolation of the patients at the Sanatorium. The importance of saving young children from an attack of this disease can scarce be over-estimated, for as the age increases the susceptibility to its infection diminishes, and the mortality arising therefrom generally decreases. There is no disease in which greater care and attention is necessary to prevent the spread of the disease, as also to prevent injurious after effects, which may and often do inflict permanent injury. But in the great majority of the houses of the working classes it is impossible to isolate the patient or to enforce proper treatment.

Whooping Cough. Of all the Zymotic diseases this is the one where the deaths fluctuate least. As with measles, warm clothing equable temperature, with proper care and treatment would go far to mitigate the severity of, and decrease the mortality from this disease.

Typhoid Fever. This disease which is always more or less prevalent in our midst, has, during the past year been very prevalent. This disease above all others is generally regarded as, to a large extent, the result of bad sanitation. This fever owes its prevalence to polluted soil and polluted water, and by the condition of the soil, high temperature and humidity. The cases that occurred in the middle quarter of the year were traced to the accidental drinking of a mixed supply of water on the works, when notices were issued warning the men against the drinking of this water the epidemic subsided. With branch drains in the state of those I examined lately at Grangetown, and the sub-soil simply saturated with filth—Typhoid Fever cannot disappear from your district. I am glad you have decided to take action against the owners to have the blot removed from your district.

Small Pox. There can be little doubt but that Small pox in this district has been effectively dealt with, owing partly to the precautions taken by your officers; but more especially to the attention of the people themselves to the vaccination of their children. (See also special Report).

IV.—Table of Population, Births, and of New Cases of Infectious Sickness, coming to the knowledge of the Medical Officer of Health, during the year 1898, in the Estcn Urban District; classified according to Diseases, Ages, and Localities.

Names of Localities adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	Population at all Ages		Registered Births	Aged under 5 or over 5	New cases of Sickness in each locality, coming to the knowledge of the Medical Officer of Health					Number of such cases removed from their homes in the several localities for treatment in Isolation Hospital.		
	Last census	Estimated to middle of 1898			Smallpox	Scarlatina	Enteric or Typhoid Fever	Continued Fever	Erysipelas	Smallpox	Scarlatina	Enteric or Typhoid Fever
Grangetown and Eston Grange ...		5,300		Under 5	..	1	1	..	...	...	...	..
				5 upwards	10	...	28	8	2	10	...	15
Eston		3,800		Under 5	...	1	..	...	...	...	...	...
				5 upwards	4	12	10	1	6	4	2	2
South Bank and Branch End ...		1,900		Under 5	...	2	...	...	...	...	1	...
				5 upwards	10	4	4	2	...	10	..	1
TOTALS	10,695	11,000	414	Under 5	...	4	1	..	...	...	1	...
				5 upwards	24	16	43	11	8	14	2	18

TABLE V.—DEATHS REGISTERED FROM ALL CAUSES DURING THE YEAR 1898.

	AGES										
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	TOTAL
I.—SPECIFIC FEBRILE, OR ZYMOTIC DISEASES	14	2	2	10	3	1	1		1	...	34
VI.—CONSTITUTIONAL DISEASES	4	5	3	3	5	2	5	4	1	1	33
V.—DEVELOPMENTAL DISEASES	3	...	...	..		..	..	...	3	5	11
VI.—LOCAL DISEASES	13	10	5	5	2	8	13	12	8	6	82
VII—DEATHS FROM VIOLENCE	...	2	1	3	2	3	...	1	...	1	13
VIII.—DEATHS ILL-DEFINED AND NOT SPECIFIED CAUSES	20	...		...	1	..	...	1	...	...	22
TOTALS	54	19	11	21	13	14	19	18	13	13	195
I.—SPECIFIC FEBRILE OR ZYMOTIC DISEASES.											
1.—MIASMATIC DISEASES.											
Smallpox { Vaccinated	...	...	...	..	2	...	...	...	1	...	3
Smallpox { Unvaccinated	..	...	...	2	1	...	...	...	...	..	3
Measles	...	1	...	..	...	...	...	...	...	...	1
Whooping Cough	4	1	...	...	...	..	...	...	...	..	5
Simple Continued and Ill-defined Fever	...	...	...	1	...	...	...	...	...	...	1
Enteric or Typhoid Fever	...	...	2	7	...	1	1	...	...	...	11
Other Miasmatic Diseases	1	...	...	...	...	...	...	...	..	...	1
2.—DIARRHŒAL DISEASES.											
Simple Cholera	1	...	...	...	...	...	...	...	...	...	1
Diarrhœa, Dysentry	8	...	...	...	...	...	...	...	...	...	8
6.—SEPTIC DISEASES.											
Pyæmia, Septicæmia	...	..	...	...	...	..	..	...	...	1	1
IV.—CONSTITUTIONAL DISEASES.											
Influenza...	...	...	...	1	...	1	...	1	..	...	3
Rheumatism	...	...	..	...	..	...	1	...	...	...	1
Cancer, Malignant Disease	...	...	...	..	..	.	..	2	1	..	3
Tabes Mesenterica	...	1	1	...	...	...	...	1	...	...	3
Tubercular Meningitis Hydrocephalus	3	..	...	...	..	...	1	..	..	...	4
Phthisis	..	2	...	1	3	1	1		...	...	8
Other forms of Tuberculosis, Scrofula	..	2	2	1	2	...	...	...	...	...	7
Anæmia. Chlorosis, Leucocythæmia	...	...	...	.	...	...	1	...	.	...	1
Glycosmia, Diabetes Mellitus	...	..	...	...	...	...	1	...	...	...	1
Other Constitutional Diseases	1	...	...	...	...	...	...	...	...	...	1

	AGES										
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	TOTAL
Brought forward	18	7	5	13	8	3	6	4	2	1	69
V.—DEVELOPMENTAL DISEASES.											
Premature Births...	3	...	...	...	...	...	...	...	..	...	3
Old Age	...	...	...	...	..	...	...	...	3	5	8
VI.—LOCAL DISEASES.											
1.—Diseases of Nervous System.											
Inflammation of Brain or Membranes	1	5	3	...	...	..	...	...	...	...	9
Apoplexy, Softening of Brain, Hemiplegia, Brain Paralysis ...	...	...	...	...	...	...	.	1	3	3	7
Convulsions	3	1	...	...	...	..	...	...	...	...	4
Disease of Spinal Chord, Paraplegia, Paralysis Agitans ...	...	...	1	..	...	...	...	...	...	...	1
Other Diseases of Nervous System	...	..	...	...	..	..	1	...	..	...	1
3.—Diseases of Circulatory System.											
Valvular Diseases of Heart	...	...	1	...	1	1	...	...	1	...	4
Other Diseases of Heart	...	...	..	1	...	1	1	...	1	...	4
Aneurism	..	...	...	...	...	...	...	..	1	...	1
4.—Diseases of Respiratory System.											
Laryngitis	...	1	...	...	...	..	...	...	...	...	1
Emphysema, Asthma	..	...	...	...	...	...	...	1	...	...	1
Bronchitis	1	...	...	1	.	..	1	1	...	2	6
Pneumonia	3	3	...	2	1	2	6	7	..	...	24
Pleurisy	...	...	...	...	...	1	...	...	..	...	1
Other Diseases of Respiratory System	1	...	...	...	...	1	...	...	...	...	2
5.—Diseases of Digestive System.											
Diseases of Stomach	...	...	...	...	...	...	2	1	...	...	3
Enteritis	2	...	...	1	...	...		...	...	...	3
Cirrhosis of Liver	...	...	...	...	..	..	...	1	...	...	1
Other Diseases of Digestive System	2	...	...	...	...	...	...	...	...	...	2
8.—Diseases of Urinary System.											
Nephritis...	...	..	...	...	...	...	1	1	1	...	3
Disease of Bladder or of Prostrate	...	..	...	.	...	.	...	...	1	...	1
9.—Diseases of Reproductive System. B. *Of Parturition.*											
Other Accidents of Child Birth	...	...	...	...	..	2	...	...	...	...	2
11.—Diseases of Integumentary System.											
Carbuncle, Phlegmon	...	...	...	...	...	...	1	...	...	...	1

VII.—DEATHS FROM VIOLENCE.												
1.—Accident or Negligence.												
Gunshot Wounds	...	...	1	...	...	...	...	...	...	...	...	1
Burn, Scald	...	2	...	...	...	...	...	..	..	...	...	2
Otherwise	...	...	...	3	2	3	...	1	...	...	...	9
3.—Suicide.												
Cut, Stab	...	...	...	...	...	...	...	...	..	1	...	1
VII.—DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES.												
Debility, Atrophy, Inanition	8	...	...	...	...	...	...	...	...	...	...	8
Mortification	...	...	...	...	...	..	...	1	...	...	...	1
Abcess	1	...	...	...	..	...	..	...	...	...	...	1
Hæmorrhage	..	...	...	...	1	..	...	...	...	...	...	1
Sudden Death (cause not ascertained)	1	...	...	...	...	...	...	...	..	...	...	1
Causes not Specified or Ill-defined	10	..	...	...	...	...		...	...	...	...	10
	54	19	11	21	13	14	19	19	13	12		195

SUMMARY OF TABLE V.

	No. of Deaths
I.—Specific Febrile, or Zymotic Diseases.	
1. Miasmatic Diseases	25
2. Diarrhœal	9
6. Sceptic	1
IV.—Constitutional Diseases	32
V.—Developmental Diseases	11
VI.—Local Diseases.	
1. Diseases of Nervous System	22
3. Diseases of Circulatory System	9
4. Diseases of Respiratory System	35
5. Diseases of Digestive System	9
Carried forward ...	153

	No. of Deaths
Brought forward	153
VI.—Local Diseases—continued.	
8. Diseases of Urinary System	4
9. Diseases of Reproductive System—	
(*b*) Diseases of Parturition	2
10. Diseases of Integumentary System	1
VII.—Violence.	
1. Accident or Negligence	12
2. Suicide	1
VII.—Ill-Defined and Not Specified Causes ...	22
Total	195

ISOLATION OF INFECTIOUS DISEASES.

VI.—The Table given below shows admissions and deaths of patients at the Sanatoriun during each year since the 16th day of May, 1894, till the 31st December, 1898. Giving a total of 350 cases and a death rate for the 4½ years of 5·1 per cent.

	ADMISSIONS.							DEATHS						
	Small pox	Scarlatina	Diphtheria	Typhus	Enteric	Other Diseases	Total	Small pox	Scarlatina	Diptheria	Typhus	Enteric	Other Disease	Total
1894	...	2	1	..	4	...	7	...	...	...	...	1	..	1
1895	...	148	...	...	8	2	158	...	1	...	...	1	...	2
1896	...	94	...	..	6	...	100	...	1	...	...	1	...	2
1897	1	24	1	...	13	1	40	...	...	...	...	1	2	3
1898	24	3	..	...	18	...	45	6	...	...	...	4	...	10
	25	271	2	..	49	3	350	6	2	...	...	8	2	18=5·1 %

GEORGE C. H. FULTON, M.B. C.M.
Medical Officer to Sanatorium.

COMMON LODGING HOUSES.

The Common Lodging-house has been maintained in a satisfactory state during the year, as regards cleanliness, air spaces, etc., etc.

INSANITARY HOUSE PROPERTY.

One house in Church Lane, Eston, was reported upon during the year, and condemned as unfit for human habitation.

DAIRIES, MILK SHOPS, & COW SHEDS ORDER.

In your district I am afraid little has been done to carry out this order, at least this was the impression I formed on making a tour of inspection for further registration purposes. As soon as the new Surveyor is appointed I hope to gradually bring about a better state of things, looking specially to air spaces, water supply, light and ventilation.

That there is real risk in eating the flesh of tubercular animals is unquestionable, but it is infinitesimal compared with the risks of partaking of milk derived from tubercolous cows. On several occasions during my visit to slaughter-

houses I have seen the udders of cows affected with marked tubercular disease. In such cases the tubercular infection passes directly into the milk, and as this article of food is generally taken in the uncooked state, the danger of infection become very great. Until we in this country adopt the system of Veterinary inspection of animals such as exists in Denmark, milk infection will constitute the *real* danger of tuberculosis being transmitted from animals to human beings. Human and bovine tuberculosis are one and the same disease, produced by the same germ and both easily transmitted to healthy animals such as guinea pigs, rabbits, kittens, etc., by the ingestion of milk containing the specific tubercle microbe. I think the present time is a favourable one for taking action, as the public are now sufficiently educated on the subject of tuberculosis to appreciate the dangers that all classes of the community incur in consuming milk without any guarantee as to its being free from tuberculosis infection. The dairies should be regularly inspected and the udders of the cows examined by the Inspector, and in case of doubt the milk could be subjected to a microscopical examination with or without a dose of tuberculin to the animal to dislodge the germ from the milk gland. A liberal allowance of air space is important, also sunlight and good ventilation.

I have endeavoured, however feebly, to place before you my views on matters appertaining to the public health of the district. My duties "to inquire into and ascertain by such ways and means as were at my disposal the causes, origin, and distribution of diseases within the Eston district, and to ascertain to what extent the same have depended on conditions capable of removal or investigation.

I have pointed out the inadequacy of the means and the difficulties with which I have to contend. I feel that your action in sanitary matters must, to a certain extent, be dependant upon economic considerations, but I believe it to be false economy which would allow sickness and death to flourish in our midst. We are proud of our material progress, prosperity, and commercial position ; and I sincerely hope that the day is not far distant when we will be able to point with pride to our Sanitary arrangements, and to a decreased and decreasing death rate.

I have the honour to remain,

Gentlemen,

Your obedient servant,

GEORGE C. H. FULTON, M.B.,

Fellow of the Royal Institute of Public Health.
Medical Officer of Health.

To the Urban District Council of Eston.

27th January, 1899.

Gentlemen,

As instructed I beg to lay before you the Surveyor's Annual Report for the year ending 31st December, 1898.

NOTICES.

Statutory Notices requiring the abatement of Nuisances, caused by Sanitary defects, &c., have been served during the year as follows, viz. :—

Blocked Branch Drains	506
Defective Privy Receptacles (new ones)	269
Tap Sinks to be opened out	2
Defective Tap Sink Paving	2
Defective Ashpits	4
Ashpits without Doors	2
Keeping Pigeons in Yards	1
Defective Pan Closet Doors	47
Badly Paved Yards	1
Privies to be converted into Pan Closets	12
Keeping Poultry in Yards	2
Swine	1
Water Supply	2
Total	851

Defective Private Drainage has been the cause of one of the most serious nuisances during the year. Out of the 506 drains stopped, 419 occurred at Grangetown, 47 at Eston, and the remaining 40 at South Bank.

It has only been necessary to take legal proceedings to enforce the carrying out of one of above notices, in the case of a Poultry Nuisance at 23 Miles Street.

INSPECTIONS.

As hitherto, systematic inspections have been made throughout the District. Attention was particularly given to accumulation of refuse, drains, water supply, possible overcrowding, &c., the presence or absence of which might prejudicially

affect health. In many instances verbal instructions have at once been complied with. The Slaughter-houses, Common Lodging-house, Cow-sheds, Milk Shops, and Bakehouses have also been regularly inspected.

SCAVENGING.

The Scavenging has been done by your own workmen in No. 1 and 2 Divisions, which has been carried out without a single complaint. The No. 3 Division has been done by contract by Mr. Thos. Richardson, of South Eston, for the sum of £40 per annum, he providing horses and men, and keeping the night-soil for his own use (the Council provide tumbler carts). On the whole he has done this work very satisfactorily. Movable receptacles for night-soil and house refuse are now nearly general throughout the District.

FIRE BRIGADES.

The Fire Brigades continue to maintain a high state of efficiency. A new Steam Fire Engine costing £315 10s., and appliances to the amount of £36 having been added to the equipment possessed by the Grangetown Fire Brigade. The Eston Fire Brigade does not need an engine of any description, having sufficient pressure in the mains.

SMALLPOX.

Between the 28th February and 3rd June, 24 cases of Smallpox occurred. Every precaution was taken in dealing with them from a Sanitary point of view in the way of isolation, destroying all bedding, and fumigation of houses, &c.

DISINFECTING AND CLEANSING.

Ninety-eight houses have been well fumigated where cases of Infectious Disease have taken place, and disinfectants freely used. In the case of Enteric Fever treated in the patients' homes, special receptacles have been provided to receive excreta from them, and emptied regularly every day until convalescent. A supply of limewash, brushes, and disinfectants have been provided to all applicants for cleansing purposes.

FLUSHING SEWERS.

The whole of your Sewers have been regularly and properly flushed. The flushing of Private Branch Drains should also, in my opinion, be undertaken by your Council.

PUBLIC IMPROVEMENTS.

The first section of the footpath between the Grangetown Subway and Fisher's Cabin has been constructed. Through the instrumentality of your Council the train service has been materially improved in connection with Eston Grange Station. Numerous lengths of old pavements (both in public and private streets) which were in a more or less worn-out condition have been renewed, both by the Council and property owners. Two ventilating shafts have been erected in connection with sewer in Pochin Road, and a marked improvement has accrued.

NEW STREETS AND BUILDINGS.

Operations in the way of making New Streets and Buildings have been pursued with slightly increased vigour during the year.

I am, Gentlemen,

Your obedient servant,

GEORGE T. CARR,

Surveyor and Inspector *(pro tem.)*